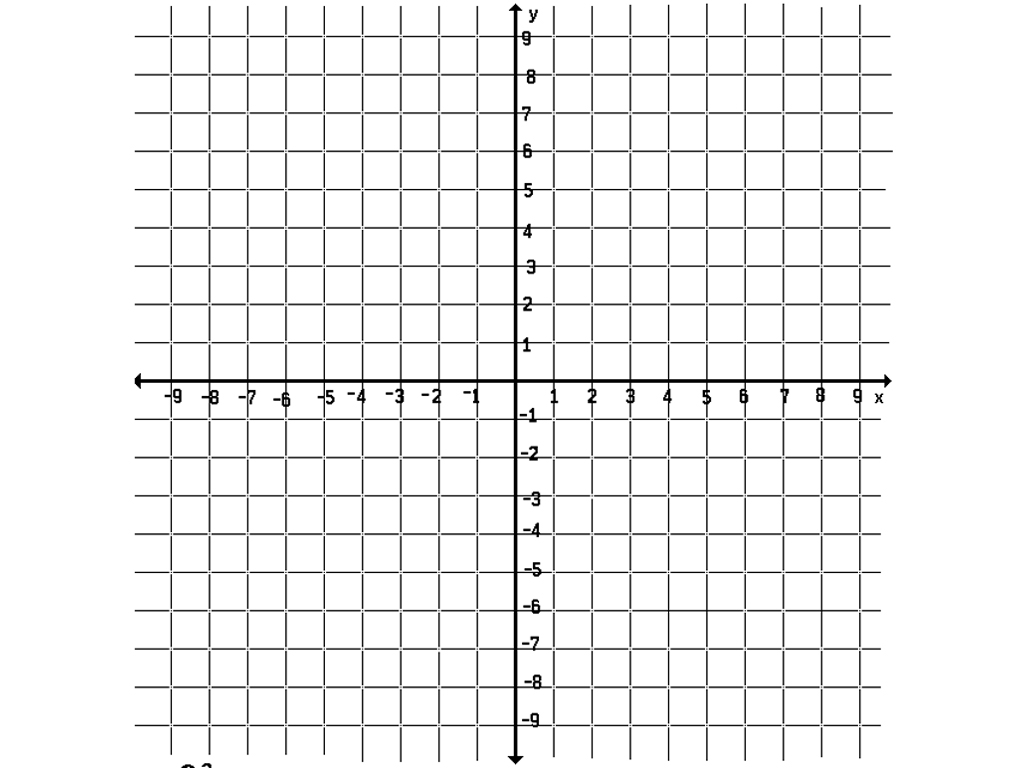
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

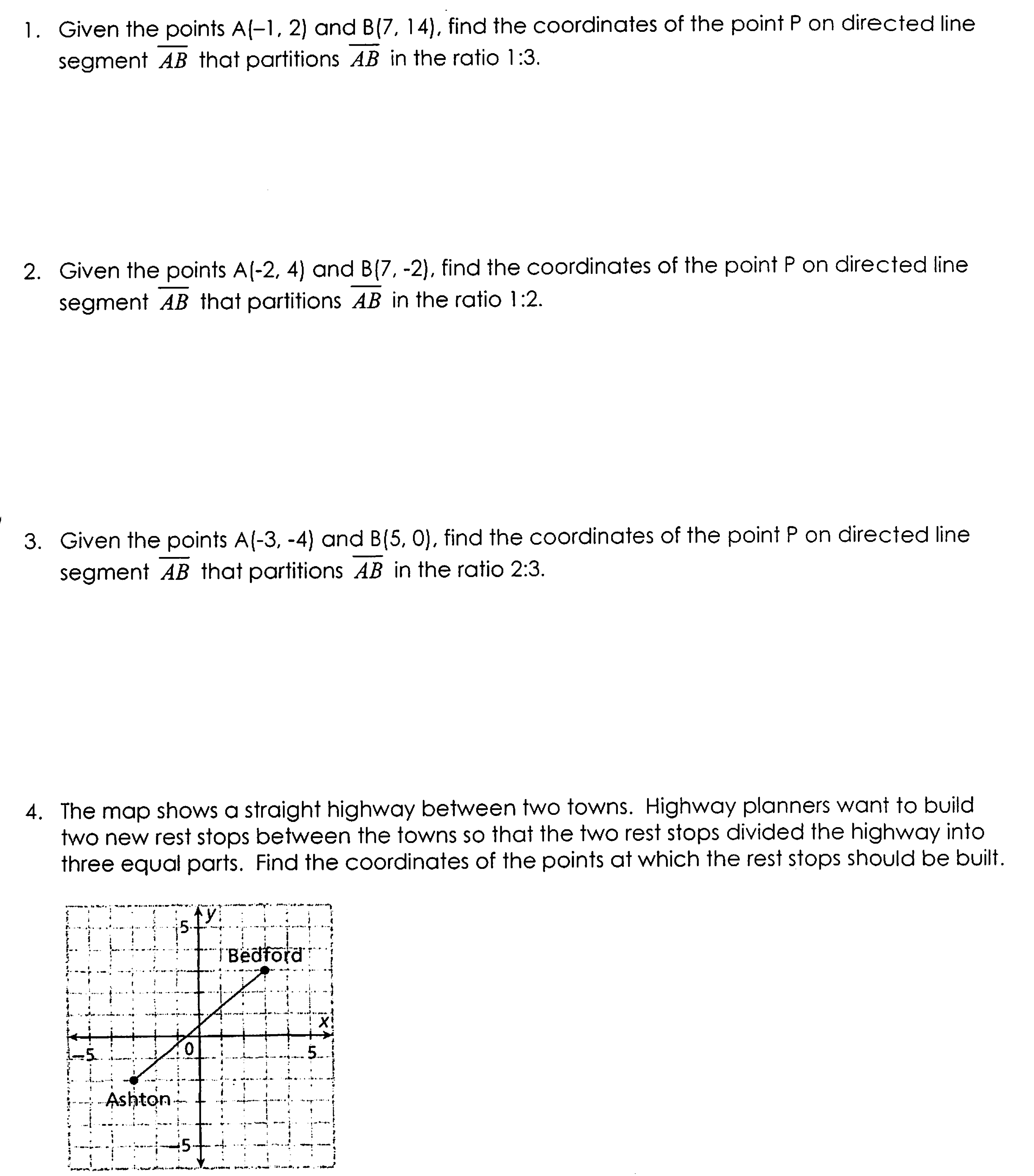
**2.7 Partitioning a Line Segment**

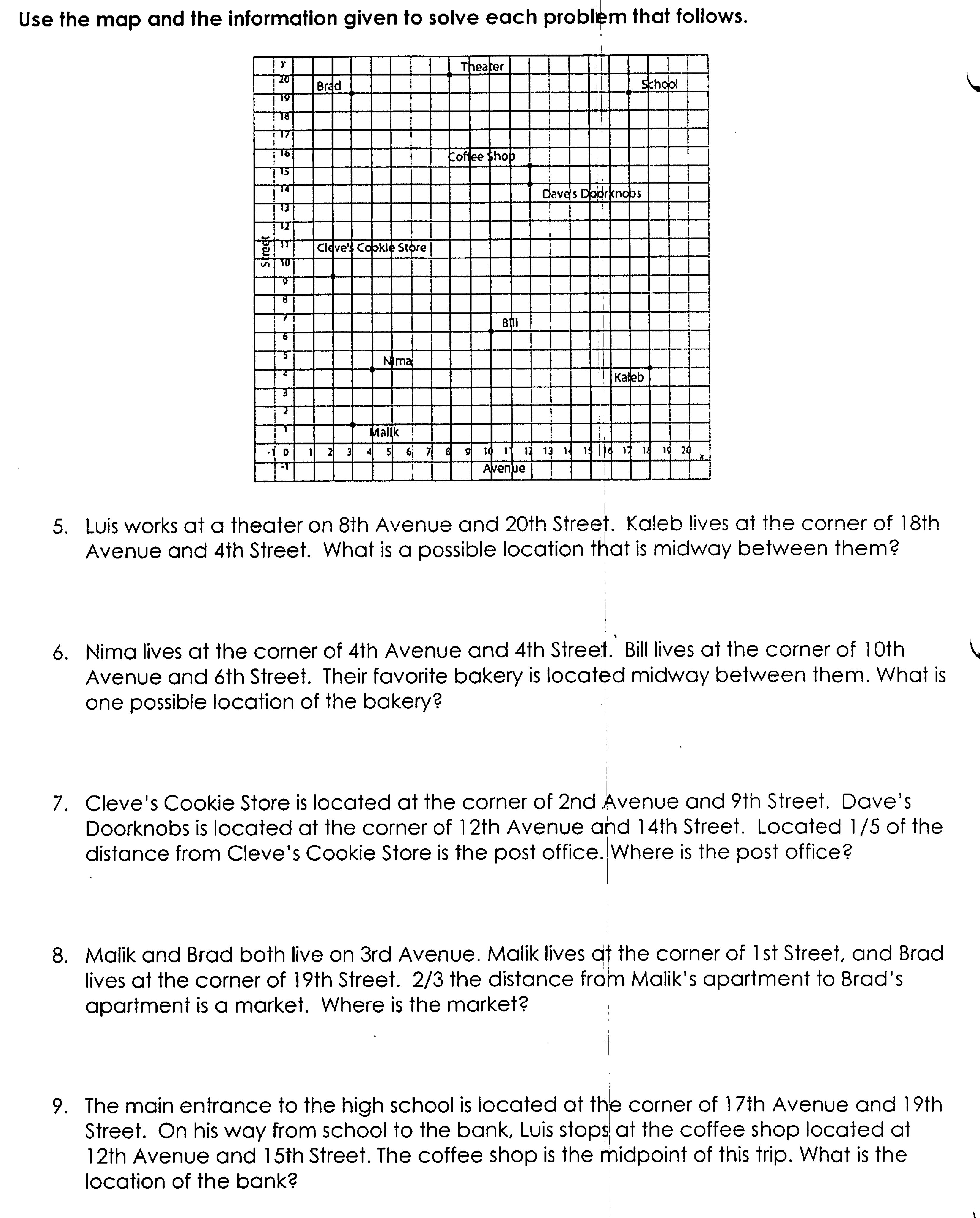
directed line segment: an initial point, P, and a terminal point Q.

ratio: a relationship between two numbers indicating how many times the first number contains the second.

* The midpoint of A(6, 4) and B(-2, -8).
* Length of AM = \_\_\_\_\_\_\_\_\_ Length of MB = \_\_\_\_\_\_\_\_\_\_
* Ratio of AM:MB = \_\_\_\_\_\_\_\_\_
* Ratio of AM:MB = 1:3. Where is M located? Verify by finding the new length of AM and MB.







1. (-3, 4) (7, 6) 1:1 2. (-9, 3) (1, 8) 2:3

3. (8, -5) (4, 7) 1:3 \* WOAH 4. (5, -6) (4, 5) 3:4

\* WOAH 5. (4, 9) (-5, -3) 2:3 \* WOAH 6. (2, -1) (-3, -5) 1:2